REMARKS

BY

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COMMAND, CONTROL, COMMUNICATIONS

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TO THE

ASSOCIATION OF THE UNITED STATES ARMY

FORT ARMSTRONG CHAPTER

IOWA-ILLINOIS QUAD CITIES AREA

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GOOD AFTERNOON. IT IS, INDEED, A PLEASURE FOR ME TO BE HERE TODAY. I HAVE BEEN ASKED TO

SHARE WITH YOU MY VIEWS ON THE CHALLENGES FACING US IN THE C3I AREA, THE DIRECTION IN WHICH THE DEPARTMENT IS HEADED, AND WHAT THIS ASSOCIATION CAN DO TO HELP.

THE CHALLENGES FACING THE C3I COMMUNITY ARE, IN MANY RESPECTS THE SAME ONES FACING THE ENTIRE DEPARTMENT OF THE DEFENSE, THE FEDERAL GOVERNMENT, AND EVEN THE ENTIRE COUNTRY FOR THAT MATTER -- WE MUST CONTINUE TO CARRY OUT OUR MISSIONS AND FUNCTIONS, AND PROVIDE EQUAL OR BETTER SERVICE TO OUR CUSTOMERS AT THIS TIME OF CONSTRAINED FUNDING LEVELS. WE, IN DEFENSE, HAVE THE SPECIFIC CHALLENGE OF SATISFYING THE PRESIDENT' S PLEDGE THAT OUR ARMED FORCES WILL REMAIN THE BEST-EQUIPPED, THE BEST-TRAINED, AND BEST-PREPARED FIGHTING FORCE ON THE FACE OF THE EARTH. BOTH HE AND THE SECRETARY OF DEFENSE HAVE COMMITTED THEMSELVES TO MAINTAINING A LEAN, HIGH-TECH, AGILE, READY-TO-FIGHT MILITARY FORCE DURING A TIME IN WHICH:

- THE THREATS ARE CHANGING AND UNPREDICTABLE,

- THE PRESIDENT' S BUDGET FOR DEFENSE FOR FY 1995 IS 35 PERCENT BELOW THE PEAK LEVEL OF FY 1985, AND

- DEFENSE IS DOWNSIZING -- THUS, PLACING INCREASED EMPHASIS ON EFFECTIVE AND EFFICIENT USE OF INFORMATION TECHNOLOGY.

INFORMATION MANAGEMENT IS PIVOTAL TO MANAGING THE EMPLOYMENT OF OUR MILITARY FORCES. THE DEFENSE INFORMATION INFRASTRUCTURE PROVIDES THE BASIC BACKBONE FOR THE INFORMATION TRANSFER SERVICES REQUIRED TO SUPPORT THE READINESS AND SUSTAINABILITY GOALS OF THE DEPARTMENT. THIS INFRASTRUCTURE SUPPORTS COMMAND AND CONTROL AND INTELLIGENCE INFORMATION TRANSFER REQUIREMENTS, AS WELL AS PERSONNEL, MEDICAL, FINANCIAL, AND LOGISTICS REQUIREMENTS. THE INCREASED PRODUCTIVITY AND FLEXIBILITY NEEDED TO SUPPORT THE DEPLOYMENT OF FORCES TETHERED TO A HOME BASE, AND PARTICIPATING IN JOINT OPERATIONS, IS DEPENDENT ON ACHIEVING A DEFENSE INFORMATION INFRASTRUCTURE THAT IS CAPABLE OF MEETING THE CRITICAL INFORMATION TRANSFER NEEDS OF OUR FORCES.

FOR EXAMPLE, IN EUROPE AND DESERT STORM WE DEPLOYED LARGE MAINFRAME COMPUTING SUPPORT FOR PERSONNEL, ADMINISTRATION, AND LOGISTICS SUPPORT. TODAY THIS SUPPORT CAN BE PROVIDED FROM THE CONTINENTAL UNITED STATES HOME BASE. THIS ALLOWS FOR MORE COMBATANT FORCES TO BE DEPLOYED OR FOR FEWER LIFT REQUIREMENTS FOR THE SAME FORCE LEVELS.

CONSEQUENTLY, THERE NEEDS TO BE A SMOOTH FLOW OF INFORMATION, OVER LONGER DISTANCES, WITHOUT

HAVING TO FIRST SOLVE COMPATIBILITY AND INTEROPERABILITY PROBLEMS. FURTHER, INFORMATION, AS THE VITAL RESOURCE OF MODERN WARFARE, MUST BE SECURED AND PROTECTED COMMENSURATE WITH ITS INTENDED USE.

WITH CHANGING THREATS, A CONSTRAINED FUNDING LEVEL, AND FORCE REDUCTIONS, OUR SPECIFIC CHALLENGES ARE TO DETERMINE HOW INFORMATION TECHNOLOGY CAN BEST BE USED TO LIVE UP TO THE PRESIDENT' S AND THE SECRETARY' S COMMITMENT. WE MUST RESHAPE DEFENSE CAPABILITIES, RATHER THAN JUST SHRINK THEM. WE MUST SMARTLY CREATE AN ENVIRONMENT TO SUPPORT MOVEMENT OF INFORMATION HORIZONTALLY AND VERTICALLY, WITHOUT REGARD TO ORGANIZATION OR SERVICE BOUNDARIES. WE MUST ENSURE THAT OUR BASE-LEVEL INFORMATION INFRASTRUCTURE IS PROTECTED AND CAPABLE OF BEING PROJECTED INTO AREAS WHERE AN INFRASTRUCTURE DOES NOT EXIST. AS WITH OTHER TECHNOLOGIES, INFORMATION TECHNOLOGY IS IMPORTANT ONLY INSOFAR AS THE FUNCTIONALITY IT PROVIDES. WE MUST LOOK AT THE CONTEXT FOR ITS USES, AND DETERMINE HOW IT CAN BEST BE EXPLOITED TO IMPROVE MISSION SUPPORT.

I' M HERE TO TELL YOU -- THESE ARE TALL ORDERS, AND WE' VE GOT OUR WORK CUT OUT FOR US. I' M ALSO HERE TO TELL YOU THAT I FIRMLY BELIEVE THAT WE ARE COLLECTIVELY UP TO THE CHALLENGE.

BUT THERE ARE SOME BASIC AND FUNDAMENTAL THINGS THAT WE MUST CONTINUE TO WORK AT TO BE SUCCESSFUL. FIRST, WE HAVE TO BE CORPORATELY COMMITTED TO THE PLAN OR APPROACH FOR MEETING OUR CHALLENGES. SECONDLY -- WE HAVE TO GET ALL DEFENSE FUNCTIONAL AREAS SINGING FROM THE SAME SHEET OF MUSIC. WE HAVE TO GET OUR PROCEDURES SYNCHRONIZED ACROSS FUNCTIONAL AREAS SO THAT WE WORK AS A TEAM RATHER THAN A COLLECTION OF SEPARATE SUPPORT ENTITIES.

THIRDLY, WE HAVE TO STANDARDIZE THE SYSTEMS WITHIN EACH FUNCTION SO THAT THERE IS NO LONGER AN ARMY WAY, OR A NAVY WAY, OR AN AIR FORCE WAY, OR A DLA OR DISA, OR DEFENSE AGENCY WAY. NOTWITHSTANDING THE FACT THAT WE' VE GOT A LONG WAY TO GO, WE ARE HEADED IN THE RIGHT DIRECTION, AND MAKING PROGRESS.

THE VISION AND OBJECTIVES ARE CLEAR, THE PLAN HAS BEEN ARTICULATED, THE SECRETARY' S AND DEPUTY SECRETARY' S COMMITMENT CONTINUES TO BE STRONG; AND I CAN SEE STEADY GROWTH IN COOPERATION, TEAMWORK, AND ESPRIT DE CORPS AT ALL LEVELS, AS WE PURSUE OUR VISION AND EXECUTE OUR PLANS.

OUR OBJECTIVE IS TO IMPROVE DEFENSE CAPABILITIES BY FOCUSING ON RE-ENGINEERING OUR BUSINESS PROCESSES, STANDARDIZING OUR DATA AND SUPPORTING INFORMATION SYSTEMS, SELECTING AND

DEPLOYING MIGRATION SYSTEMS, AND STRENGTHENING OUR COMPUTER AND COMMUNICATIONS INFRASTRUCTURE. EACH OF THESE EFFORTS IS BEING PURSUED UNDER THE RUBRIC OF OUR CORPORATE INFORMATION MANAGEMENT (OR CIM) INITIATIVE.

DR. PERRY HAS CONTINUOUSLY EXPRESSED HIS SUPPORT FOR THE CIM GOALS, AND EMBRACED CIM AS A MEANS TO ACHIEVE DEPARTMENT-WIDE IMPROVEMENTS. IN FACT, HE HAS REAFFIRMED HIS COMMITMENT BY GREATLY ACCELERATING THE PACE AT WHICH KEY ASPECTS OF CIM ARE TO BE IMPLEMENTED. WE ARE NOW ON A CHARTERED COURSE WHERE THE SENIOR FUNCTIONAL OFFICIALS IN AREAS SUCH AS FINANCE AND ACCOUNTING, PERSONNEL, AND LOGISTICS HAVE THE TASK OF SELECTING AND DEPLOYING THEIR MIGRATION SYSTEMS WITHIN THREE YEARS, WHILE AT THE SAME TIME ELIMINATING THOUSANDS OF LEGACY SYSTEMS; THE MIGRATION SYSTEMS ARE AN INTERIM STEP TOWARD A LONG TERM GOAL OF IMPLEMENTING TARGET SYSTEMS IN AN OPEN SYSTEMS ENVIRONMENT. WE MUST IMPLEMENT DATA STANDARDIZATION DURING THIS SAME TIME FRAME; AND IN CONJUNCTION WITH BOTH EFFORTS, WE ARE RE-ENGINEERING OUR BUSINESS PROCESSES.

LET ME SHARE WITH YOU JUST ONE EXAMPLE OF THE MANY FUNCTIONAL AREAS THAT IS MAKING STEADY PROGRESS.

THE DEFENSE FINANCE AND ACCOUNTING SERVICE

(OR DFAS) PROVIDES ACCOUNTING SUPPORT AND FINANCIAL MANAGEMENT INFORMATION TO MANAGERS AT ALL LEVELS THROUGHOUT THE DEPARTMENT OF DEFENSE. FOREIGN GOVERNMENTS RELY ON DFAS MANAGEMENT TO ACCOUNT FOR THEIR SECURITY ASSISTANCE PURCHASES.

JUST IN THE DOD FINANCE COMMUNITY ALONE, THEY HAVE OVER 250 LEGACY SYSTEMS. EACH OF THESE IS BEING EVALUATED AS POSSIBLE MIGRATORY SYSTEMS. EIGHT HAVE BEEN APPROVED. ONE OF THESE IS THE DEFENSE JOINT MILITARY PAY SYSTEM WHICH WILL PAY ARMY, NAVY, AND AIR FORCE ACTIVE DUTY MEMBERS; RESERVE AND NATIONAL GUARD PERSONNEL; RESERVE OFFICER TRAINING CORPS CADETS AND MIDSHIPMEN; ARMED FORCES HEALTH PROFESSIONAL SCHOLARSHIP PROGRAM STUDENTS; AND MILITARY ACADEMY CADETS AND MIDSHIPMEN. THE BENEFITS OF THIS SYSTEM INCLUDE STANDARDIZED MILITARY PAY, REDUCED LONG-RANGE COSTS, ENHANCED CUSTOMER SERVICE, AND IMPROVED PAY SERVICE CAPABILITY FOR ANY EMERGENCY OR WARTIME MOBILIZATION SCENARIO.

THE DOD FINANCE COMMUNITY ALSO HAS APPROVED THE DEFENSE RETIREE AND ANNUITANT PAY SYSTEM AS THE DOD SYSTEM TO PROCESS RETIRED PAY AND ANNUITIES FOR ALL MILITARY RETIREES AND ANNUITANTS. THIS STANDARDIZED, CENTRALIZED SYSTEM, WHICH WILL REPLACE CURRENT SYSTEMS, WILL BE ABLE TO INTERFACE WITH APPLICABLE PERSONNEL,

ACCOUNTING AND DISBURSING SYSTEMS -- THEREBY REDUCING COSTS AND IMPROVING CUSTOMER SERVICE.

IN THE FINANCIAL MANAGEMENT AREA, FOR EXAMPLE, THEY HAVE OVER 100,000 DATA ELEMENTS IN THEIR 250+ FINANCE AND ACCOUNTING SYSTEMS. DETAILED DATA MODELING HAS SHOWN THAT THEY WILL LIKELY REQUIRE LESS THAN 1/100TH OF THE DATA ELEMENTS TO ACCOMPLISH THE FULL RANGE OF THEIR RESPONSIBILITIES. THE DEPARTMENT OF DEFENSE COMPTROLLER HAS SET A GOAL OF HAVING 90 PERCENT OF THE REQUIRED DATA ELEMENTS APPROVED BY THE END OF THE YEAR. ACHIEVING THIS GOAL PROVIDES A SOUND BASIS FOR CREATING A COMMON LANGUAGE FOR DISPARATE SYSTEMS TO USE, OR TO DESIGN A NEW INTEGRATED FINANCE AND ACCOUNTING SYSTEM.

SIMILAR AGGRESSIVE ACTIONS ARE UNDERWAY IN OTHER FUNCTIONAL AREAS AS WELL. FOR EXAMPLE, IN THE HEALTH AREA, INDICATIONS ARE THAT THEY WILL HAVE THEIR HIGHEST PRIORITY DATA ITEMS STANDARDIZED DURING THIS CALENDAR YEAR, WITH A PROJECTION THAT BY THE END OF CALENDAR YEAR 1995, DATA STANDARDIZATION IN THE ENTIRE MEDICAL FUNCTION AREA WILL BE COMPLETED.

HAVING A PROLIFERATION OF DISPARATE SYSTEMS AND ASSOCIATED DATA ELEMENTS IS NOT A PROBLEM THAT IS PECULIAR TO THE FINANCE AND ACCOUNTING OR THE HEALTH COMMUNITIES; IT’ S ONE THAT PERMEATES

THROUGHOUT ALL OF OUR FUNCTIONAL AREAS, AS WELL AS ACROSS FUNCTIONS.

THE CRITICALITY OF DATA STANDARDIZATION TO OUR SUCCESS CAN NOT BE OVERSTATED. THAT IS WHY WE HAVE SET A GOAL OF STANDARDIZING DEFENSE DATA FORMATS AND DEFINITIONS WITHIN THREE YEARS, AND WHY WE ARE NOW IN THE MIDST OF OUR MOST CONCENTRATED, WIDE-RANGING DATA STANDARDIZATION EFFORT EVER UNDERTAKEN. THIS EFFORT IS BEING LED BY THE USERS OF THE DATA RATHER THAN THE INFORMATION TECHNICIAN.

IF WE ARE SUCCESSFUL WITH DATA STANDARDIZATION, AND I AM OPTIMISTIC THAT WE WILL BE, WE WILL HAVE STANDARDIZED THE VOCABULARY USED WITHIN THE DEPARTMENT AND GREATLY INCREASED THE OPPORTUNITY FOR EFFICIENT DATA EXCHANGE AND INTEGRATED OPERATIONS AMONG THE DEPARTMENT' S INFORMATION SYSTEMS. WE WILL HAVE IMPROVED DATA SHARING, CONTROLLED DATA REDUNDANCY, MINIMIZED DATA HANDLING, AND IMPROVED DATA QUALITY AND INTEGRITY -- ALL OF WHICH SUPPORT OUR GOALS OF INTEROPERABILITY AMONG OPERATIONAL FORCES, AS WELL AS PROCESSES AND SYSTEMS.

WE ARE NOW IN THE GLOBAL INFORMATION ENVIRONMENT , WHICH IS MARKED BY THE BROAD INTEGRATION OF INFORMATION SYSTEMS, MAJOR ADVANCEMENTS IN NETWORKING, THE SHARING OF

INFORMATION, AND THE MIGRATION OF LEGACY SYSTEMS TO A COMMON DENOMINATOR. CONCEPTS SUCH AS THE NATIONAL INFORMATION INFRASTRUCTURE AND DEFENSE INFORMATION INFRASTRUCTURE REFLECT THE EXPLOSION OF HIGH-SPEED, COMPLEX COMMUNICATION SYSTEMS AND NETWORKS, AND THIS IS PRESENTING SERIOUS CHALLENGES FOR INFORMATION SYSTEMS SECURITY (OR INFOSEC).

THE VULNERABILITY TO COMMUNICATIONS SYSTEMS AND NETWORKS IS INCREASING AS DATA FLOW IS FACILITATED. THE ABILITY OF INDIVIDUALS TO PENETRATE COMPLEX COMPUTER NETWORKS, AND DENY, DAMAGE, OR DESTROY DATA, HAS BEEN DEMONSTRATED ON MANY OCCASIONS. MOSTLY RECENTLY THERE HAVE BEEN SEVERAL WELL PUBLICIZED INTRUSIONS INTO THE INTERNET. FINANCIAL SYSTEMS POSE A HIGH LEVEL OF RISK, AND THE POTENTIAL THREAT TO C3I-DEPLOYED SYSTEMS IS OBVIOUS AS WE ARE MORE AND MORE INTERCONNECTED. THE CHALLENGE TO INFORMATION SYSTEMS SECURITY IS TO ENSURE THIS SIGNIFICANT THREAT IS CLEARLY UNDERSTOOD, AND THEN GUARANTEE THE AUTHENTICATION, INTEGRITY, AND CONFIDENTIALITY OF COMMUNICATIONS.

A MAJOR INITIATIVE TO MEET THE INFOSEC CHALLENGE OF THE 1990S IS THE ENGINEERING OF MULTI-LEVEL SECURITY SOLUTIONS, SUCH AS TRUSTED GUARDS, COMPARTMENTED WORKSTATIONS, AND

END-TO-END ENCRYPTION DEVICES, WHICH ENSURE THE SECURITY, AVAILABILITY, AND INTEGRITY OF U.S. GOVERNMENT AND DEFENSE INFORMATION SYSTEMS. AN EXAMPLE HERE IS THE NSA TESSERA CARD THAT HAS RECENTLY BEEN DEVELOPED FOR THE DEFENSE MESSAGE SYSTEM TO SECURE ITS SENSITIVE UNCLASSIFIED E-MAIL TRAFFIC.

WE MUST DESIGN AND EMBED INFOSEC INTO THE EARLIEST STAGES OF SYSTEM DEVELOPMENT, THEREBY ENSURING AFFORDABLE, INTEGRATED APPLICATION OF INFOSEC INTO THE FINAL SYSTEM.

SPEAKING OF SOFTWARE DESIGN AND DEVELOPMENT, I BELIEVE WE ARE WASTING A LOT OF MONEY, BRAINPOWER, AND EFFORT IN THIS AREA. WE HAVE ALLOWED SOFTWARE TO BECOME A DEEP HOLE FOR DEFENSE DOLLARS, AND THIS MUST STOP. ALL TOO OFTEN, SOFTWARE ENGINEERS ARE REINVENTING THE WHEEL EACH TIME THEY ADD A FEATURE OR CORRECT AN ERROR; THIS TOO MUST STOP.

IT IS IMPERATIVE THAT SOFTWARE REUSE BECOME THE RULE RATHER THAN THE EXCEPTION. REUSABILITY OF SOFTWARE MUST BECOME AS COMMON AS HAVING THE SAME HARDWARE SUPPORTING MULTIPLE FUNCTIONS.

WE CANNOT JUST CUT OFF SOFTWARE PRODUCTION AND RELY ON OLD APPLICATIONS -- MAINTAINING THE OLD CODE IS TOO EXPENSIVE, AND THE CHANGEABILITY OF THE DEFENSE MISSION REQUIRES THAT WE SUPPORT

IT WITH CHANGES IN SOFTWARE.

WHEN WE NEED SOFTWARE, OUR OPTION OF CHOICE WILL BE TO USE COMMERCIAL, OFF-THE-SHELF PRODUCTS. AND WHEN WE NEED TO WRITE CODE, IT WILL BE WRITTEN IN ADA.

ADA IS WELL-SUITED FOR REUSE BECAUSE IT SUPPORTS ERROR-FREE INTERFACES AMONG SOFTWARE MODULES. THIS ALSO MAKES ADA IDEAL FOR BEING THE GLUE BETWEEN SOFTWARE MODULES THAT HAVE BEEN WRITTEN IN OTHER LANGUAGES. THIS IS PARTICULARLY APPEALING IN BINDING TOGETHER COTS SOFTWARE FROM DIFFERENT SOURCES.

RATHER THAN HAVING OUR CODE BE HAND-CRAFTED, ORIGINAL WORKS OF ART, WE WANT THEM TO BE SOUNDLY ENGINEERED ENTITIES THAT WE CAN REALIGN OR INTEGRATE WITH OTHER WELL-ENGINEERED COMPONENTS TO GIVE US THE SYSTEMS WE NEED MORE QUICKLY AND MORE RELIABLY.

THIS NOW BRINGS ME TO THE FINAL PILLAR OF OUR EFFORTS TO IMPROVE THE DEFENSE INFORMATION MANAGEMENT CAPABILITIES; NAMELY, THE COMMUNICATIONS AND COMPUTER INFRASTRUCTURE.

WITH RESPECT TO COMMUNICATIONS, WE ARE WORKING WITH THE GENERAL SERVICES ADMINISTRATION TO EXPLORE THE APPLICABILITY OF GSA AND DOD ACQUISITION OF ONE SINGLE, JOINTLY MANAGED NETWORK FOR ALL FEDERAL GOVERNMENT USERS TO

REPLACE THE FTS-2000 AND THE EXISTING DEFENSE SWITCHED NETWORK. SEPARATELY FOR DOD, WE ARE STRUCTURING A DEFENSE INFORMATION SYSTEMS NETWORK CALLED DISN.

THE DISN IS TO BE A GLOBAL NETWORK TO INTEGRATE EXISTING DEFENSE COMMUNICATIONS SYSTEMS ASSETS, INCLUDING COMMUNICATIONS SATELLITES (BOTH MILITARY AND THOSE WE ACQUIRE COMMERCIALLY), AND TELECOMMUNICATIONS SERVICES (ALSO REGARDLESS OF SOURCE AND WHETHER OR NOT THEY ARE DEDICATED TO DEFENSE USAGE). THE DISN IS TO PROVIDE A CONSOLIDATED WORLDWIDE DEFENSE TELECOMMUNICATIONS INFRASTRUCTURE.

THE DATA MEGACENTER DEDICATION, WHICH IS OCCURRING IN CONJUNCTION WITH THESE PROCEEDINGS, REFLECTS OUR COMPUTING INFRASTRUCTURE PLANS. THESE 16 DATA MEGACENTERS WILL SERVE AS MULTIPLIERS FOR THE SAVINGS TO BE GAINED IN EMPLOYING STANDARD SYSTEMS ACROSS SUCH AREAS AS FINANCE AND ACCOUNTING, MEDICAL, AND LOGISTICCS INVENTORY CONTROL CENTERS CENTERS AND DEPOTS.

IMPLEMENTATION OF THESE LARGE STANDARD BUSINESS SYSTEMS AT THE DISA MEGACENTERS -- WILL ENSURE THAT ALL OF THE SERVICES OPERATE FROM EQUALLY TECHNOLOGICALLY ADVANCED PLATFORMS, THUS ENSURING THAT PERFORMANCE AND COST METRICS ARE EQUALLY APPLIED -- ENSURE THAT BUSINESS PROCESS

RE-ENGINEERING CAN BE DONE ONCE, AND PROVIDE THE BIGGEST PAYBACK FOR THE DEPARTMENT AND A LEVEL PLAYING FIELD FOR COMPARING PERFORMANCE.

BEFORE COMING HERE TODAY, I WAS PROVIDED WITH A FACT SHEET ON THE ROCK ISLAND MEGACENTER. ONE OF THE ITEMS ON THE SHEET THAT CAUGHT MY EYE WAS SOME STATISTICS ON THE PERSONNEL -- THE TECHNICAL STAFF HAS AN AVERAGE OF NEARLY 14 YEARS EXPERIENCE, AND THE MANAGEMENT STAFF HAS AN AVERAGE OF 23 YEARS EXPERIENCE.

TO BE A MANAGER, GOOD IN YOUR BUSINESS OR GOOD IN YOUR TRADE, YOU NEED TO STUDY AND CONTINUALLY KEEP UP WITH TECHNOLOGY. YOU MUST MAINTAIN THE CURRENCY AND COMPLETENESS OF YOUR OWN PERSONAL TECHNOLOGY BASE. MOREOVER, YOU MUST STRESS THAT YOUR STAFFS DO LIKEWISE. AT THE SAME TIME, WE AS MANAGERS MUST ENSURE THAT EDUCATION AND TRAINING OPPORTUNITIES ARE AVAILABLE FOR OUR STAFFS TO HONE THEIR SKILLS, AND THAT OUR TRAINING INSTITUTIONS MAKE MAXIMUM USE OF INFORMATION TECHNOLOGY TO DELIVER THE GREATEST AMOUNT OF TRAINING IN THE MOST COST-EFFECTIVE AND EFFICIENT MANNER.

I BELIEVE THAT SOME OF THE THINGS THAT THE ARMY MANAGEMENT ENGINEERING COLLEGE (OR AMEC) IS DOING IN THIS REGARD ARE RIGHT ON THE MARK. I UNDERSTAND THAT AMEC IS EXPLORING SOME REALLY

INTERESTING INITIATIVES REGARDING THE USE OF INFORMATION TECHNOLOGY FOR TRAINING PURPOSES; FOR EXAMPLE, AMEC' S PLANNED INSTALLATION AND USE OF A MULTIMEDIA LABORATORY TO INCLUDE A COURSEWARE PRODUCTION STUDIO AND VIDEO STUDIO TO DEVELOP, TEST, AND DISTRIBUTE TRAINING COURSES FOR DESKTOP DELIVERY.

THE USE OF MULTIMEDIA TRAINING WILL DRAMATICALLY REDUCE THE LONG-STANDING TRADITIONAL REQUIREMENT OF CLASSROOM TRAINING. THESE CAPABILITIES WILL ALLOW INDIVIDUALS TO OBTAIN TRAINING WHEN AND WHERE NEEDED. IN TODAY' S ENVIRONMENT, FLEXIBILITY IS REQUIRED TO ALLOW THE WORKFORCE TO UPDATE SKILLS AND RECEIVE TRAINING VIA METHODS OTHER THAN THE TRADITIONAL WAY OF CLASSROOM TRAINING. AMEC' S SUCCESSES IN THE USE OF MULTIMEDIA DISTANCE TRAINING CAN BE TRANSPORTED THROUGHOUT THE EDUCATIONAL COMMUNITIES WITHIN THE DEPARTMENT.

IN SUMMARY, I BELIEVE WE ARE MAKING STEADY PROGRESS; BUT WE ARE MOST CERTAINLY NOT THERE. WE HAVE MANY TOUGH CHALLENGES AHEAD OF US; NOT THE LEAST OF WHICH IS ACCELERATING THE CULTURAL CHANGES REQUIRED TO BE SUCCESSFUL. BUT I DO BELIEVE THAT WE HAVE TAKEN SOME KEY STEPS. ARE WE COMPLETELY SATISFIED? THE ANSWER IS: NO. BUT WE HAVE A LOT OF GOOD PEOPLE, LIKE

YOURSELVES, WHO ARE COMMITTED TO THE IMPROVEMENTS, EFFICIENCIES, AND PRODUCTIVITY THAT ARE THE ESSENCE OF CIM.

THANK YOU LADIES AND GENTLEMEN FOR THE OPPORTUNITY TO SPEAK TO YOU TODAY. I WELCOME ANY QUESTIONS THAT YOU MAY HAVE.